

## PMComanchePeakPEm Resource

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**From:** Monarque, Stephen  
**Sent:** Tuesday, February 02, 2010 11:18 AM  
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**Cc:** ComanchePeakCOL Resource; Otto, Ngola  
**Subject:** Comanche Peak RCOL Chapter 125 - RAI Number 136  
**Attachments:** RAI 4208 (RAI 136).doc

The NRC staff has identified that additional information is needed to continue its review of the combined license application. The NRC staff's request for additional information (RAI) is contained in the attachment. Luminant is requested to inform the NRC staff if a conference call is needed.

The response to this RAI is due within 35 calendar days of February 2, 2010.

Note: If changes are needed to the safety analysis report, the NRC staff requests that the RAI response include the proposed changes.

thanks,

Stephen Monarque  
U. S. Nuclear Regulatory Commission  
NRO/DNRL/NMIP  
301-415-1544

**Hearing Identifier:** ComanchePeak\_COL\_Public  
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**Received Date:** 2/2/2010 11:18:07 AM  
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Request for Additional Information (RAI) No. 4208 COLA Revision 1

RAI Number 136

2/2/2010

Comanche Peak Units 3 and 4  
Luminant Generation Company, LLC.  
Docket No. 52-034 and 52-035  
SRP Section: 12.05 - Operational Radiation Protection Program  
Application Section: 12.5

QUESTIONS for Health Physics Branch (CHPB)

12.05-5

10 CFR 20 Subpart H, Regulatory Guide 8.15

This is a supplemental Question to RAI No. 3319 (Comanche Peak RAI #100), Question 12.05-1 issued on September 30, 2009.

Regulatory Guide (RG) 8.15, 'Acceptable Programs for Respiratory Protection,' Revision 1 (October 1999) provides guidance to licensees regarding methods acceptable to the NRC staff for demonstrating compliance with the respiratory protection requirements of 10 CFR 20 Subpart H "Respiratory Protection and Controls to Restrict Internal Exposure in Restricted Areas". RG 8.15 notes that in 1988, the NRC and the Occupational Safety and Health Administration (OSHA) signed a Memorandum of Understanding (MOU) to clarify jurisdictional responsibilities at NRC-licensed facilities. The MOU makes it clear that if an NRC licensee is using respiratory protection to protect workers against non-radiological hazards, the OSHA requirements apply.

The COL applicant's response to the NRC staff's RAI, dated November 11, 2009, noted that COLA FSAR Section 12.5, "Operational Radiation Protection Program" incorporates by reference NEI 07-03, "Generic FSAR Template Guidance for Radiation Protection Program Description". Subsection 3.5.9 of the NRC Safety Evaluation confirms that the approved version of NEI 07-03 is in compliance with RG 8.15 and 10 CFR Part 20. While this statement is true, section 12.5.4.9 of NEI 07-03 states that the respiratory protection program will comply with 10 CFR 20 Subpart H and will be consistent with the guidance in RG 8.15, however, as stated in the original question, NEI 07-03A only addresses the radiological respiratory protection program, as described in RG 8.15. Following the guidance of RG 8.15 is insufficient to ensure compliance with the regulatory requirements for non-radiological hazards. OSHA regulations are not listed as a reference for the development of NEI 07-03A, or as part of the Safety Evaluation for the template.

The Comanche Peak Units 3 and 4 Combined License Application (COLA) Revision 1, Part 5 Emergency Plan Section J.6.a states that self-contained breathing apparatuses (SCBAs) are available for use in areas that are deficient in oxygen or when fighting fires. In COLA Revision 1, FSAR Subsection 9.5.1.6.1.8, the fire brigade usage of SCBAs is in accordance with the relevant National Fire Protection Association (NFPA) guidance.

The US-APWR FSAR Tier 2 Revision 1 Table 9.5.1-2 notes that fire brigade members are to be trained in accordance with NFPA 1500, but it does not discuss other non-fire brigade use of respiratory protection equipment, such as would be needed for fume, dust, oxygen deficient respiratory protection. In addition, neither US-APWR FSAR Tier 2 Revision 1 Chapter 1, nor chapter 9 reference OSHA respiratory protection regulations.

The applicant further notes that the respiratory protection program described in COLA FSAR Section 12.5 is focused primarily on the use of respiratory protection equipment in areas containing airborne radioactivity, although, Comanche Peak Units 3 and 4 will have only one plant-specific respiratory protection program to cover both radiological and non-radiological respirator usage. While the applicant does note that the radiation protection program for CPNPP Units 3 and 4, will be based in part on the procedures in use at CPNPP 1 and 2, since this information is not available for review, the NRC staff is unable to ascertain which aspects of the existing programs at CPNPP 1 & 2 address this concern.

COLA FSAR Section 12.5 states that only respiratory protection equipment that is tested and certified by the National Institute for Occupational - Safety and Health/Mine Safety and Health Administration (NIOSH/MSHA) is used, unless otherwise authorized by the NRC (see NEI07-03A Subsection 12.5.3.3). COLA FSAR Section 12.5 states that if NIOSH/MSHA-certified equipment is not used, the equipment will be in compliance with 10 CFR 20.1703(b) and 20.1705. The applicant's use of these statements implies that some equipment certified for just radiological hazards under 10 CFR 20.1703(b), may be used in the radiologically controlled area, for radiological or non-radiological conditions, without recognition that the NRC certification extends only to the use of the devices for protection from radiological hazards.

For the reasons noted above, the applicant is requested to revise and update the FSAR Section 12.5 to describe those program elements that will be used to satisfy the respiratory protection program requirements associated with non-radiological hazards (i.e. Toxic gases, smoke or immediate danger to life and health (IDLH) atmospheres) that may be encountered in the radiological controlled areas of the plant.

#### 12.05-6

In its response, dated November 11, 2009, to the NRC staff's RAI 3319 (RAI 100), Question 12.05-2, the applicant referenced the Design Certification (DC) applicant response to US-APWR Tier 2 DCD RAI 147-1850, dated February 6, 2009, and RAI 428-2910, Question 12.03-12.04-3, dated September 30, 2009. The DC applicant revised section 12.3 to include some design specifications for selection of materials employed for the purpose of implementing the as low as reasonably achievable (ALARA) concept during construction. However, the DC applicant's response did not describe the program elements, that when implemented, will provide an on going understanding of the plant source term, including knowledge of input mechanisms and the process to reduce unnecessary contributions to the plant source term from components. Since the on going effort to reduce the radiation source term in the plant is an essential element of meeting the requirements of 10 CFR 20.1101(b), the COL applicant is requested to revise and update the combined license (COL) application final safety analysis report (CPNPP FSAR) section 12.5 to describe those program elements related to establishing an understanding of input mechanisms to the plant source term and the

program elements that will be used to reduce unnecessary contributions to the plant source term from components. Alternately, the applicant may describe the use of a different approach.